



# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF

Confirmation No.: 8085

YAMADA et al.

Group Art Unit: 2822

Appln. No.: 09/993,967

Examiner: Lewis, Monica

Filed: November 27, 2001

Title: SEMICONDUCTOR DEVICE WITH VERTICAL TRANSISTOR FORMED IN A

SILICON-ON-INSULATOR SUBSTRATE (As Amended)

October 16, 2002

## **AMENDMENT**

Hon. Commissioner of Patents Washington, D.C. 20231

Sir:

In response to the Office Action dated July 17, 2002, please enter the following amendments and remarks:

## IN THE TITLE:

Please delete the present title and replace it with the following new title: SEMICONDUCTOR DEVICE WITH VERTICAL TRANSISTOR FORMED IN A SILICON-ON-INSULATOR SUBSTRATE

Please see the attached Appendix for the changes made to effect the title.

#### **IN THE SPECIFICATION:**

Please replace the paragraph beginning on page 1, line 9 with the following new paragraph:

This invention relates in general to semiconductor microtechnologies and, more This invention relates in general to semiconductor microtechnologies and, more specifically, to highly integrated semiconductor devices with dynamic random access memory (DRAM) cells each having a trench capacitor and a vertical transistor that works perpendicular to the surface of a semiconductor chip. The invention also relates to methodology for fabrication of semiconductor devices of the type stated above.

ᇙᇙ 88

# MITHE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): YAMADA et al. Appln. No.:

09 Series Code ↑

993,967

Serial No. 个

Filed: November 27, 2001 Hon. Commissioner of Patents Washington, D.C. 20231

Sir:

REPLY/AMENDMENT/LETTER

Art Unit ليت

Examiner: Atty. Dkt.

2822 Lewis, Monica

284032 01F171

Client Ref M# SEMICONDUCTOR DEVICE WITH Appin. Title:

> VERTICAL TRANSISTOR FORMED IN A SILICON-ON-INSULATOR

SUBSTRATE (As Amended)

Date: October 16, 2002

This is a reply/amendment/letter in the above-identified application and includes the herewith attachment of same date and subject which is incorporated hereinto by reference and the signature below is treated as the signature to the attachment in absence of a signature thereto.

#### FEE REQUIREMENTS FOR CLAIMS AS AMENDED

1. Small Entity claim		•					
A. NOT made For B & C	Claims	Highest number		Present Extra	Large/Small Entity	Additional	Fee Code
C. made herewith Separate Paper	remaining after amendment	previously pa	aid for			Fee	Lg/Sm
D. ☐ made previously (Pat-256)							
2. Total Effective Claims	26	**minus	20	6	x \$18/\$9 =	+ \$108	103/203
3. Independent Claims	6	***minus	5	1	x \$84/\$42 =	+ \$84	102/202
4. If amendment enters <u>proper</u> multiple dependent claim(s) into this application for <u>first</u>							
time (leave blank if this is a reissue application)					+ \$280/\$140 =	+ \$0	104/204
5. Original due Date: October 17, 2002 NONE					4 (4-2)	4.	
6. Petition is hereby made to extend the original due (1 mo) \$110/\$55 =						49	115/215
date to cover the date this response is filed for which the (2 mos)   \$400/\$200 =   + \$0							116/216 117/217
requisite fee is attached (3 mos)   \$920/\$460 =							117/217
(4 mos)   \$1,440/\$720=							128/228
(5 mos) \$1,960/\$980=						29	
7. Enter any previous extension fee <u>paid</u> since above <u>original</u> due date and <u>subtract</u>					- \$0		
8.					Extension Fee	+ \$0	
9. If <u>Terminal Disclaimer</u> attached, <u>add</u> Rule 20(d) official fee					+ \$110/\$55	+ \$0	148/248
10. If IDS attached requires Official Fee under Rule 97 (c), add					+ \$180	+ \$0	126 126
or if Rule 97(d) Requestadd					+ \$180	,	
11. After-Final Request Fee per rules 129(a) and 17(r)					+ \$740/370	+ \$0	146/246
12. No. of additional inventions for examination per Rule 129(b)					x \$740/370 ea	+ \$0	149/249
13. Request for Continued Examination (RCE)					+ \$740/370	+ \$0	1179/1279
14. Petition fee for						+ \$0	
15. TOTAL FEE =						\$192	
16. *If the entry in this space is less than entry in next space, the "Present Extra" result is "0".						PLEASE CHARGE	
17. **If the "Highest number previously paid for" in this space is less than 20, write "20" in this space.  18. ***If the "Highest number previously paid for" in this space is less than 3, write "3" in this space.						OUR DEP. ACCT	
Our Deposit Account No. 03-3975)							

(Our Order No. 44020 284032

CHARGE STATEMENT: The Commissioner is hereby authorized to charge any fee specifically authorized hereafter, or any missing or insufficient fee(s) filed, or asserted to be filed, or which should have been filed herewith or concerning any paper filed hereafter, and which may be required under Rules 16-18 (missing or insufficiencies only) now or hereafter relative to this application and the resulting Official Document under Rule 20, or credit any overpayment, to our Accounting/Order Nos. shown above, for which purpose a duplicate copy of this sheet is attached.

This CHARGE STATEMENT does not authorize charge of the issue fee until/unless an issue fee transmittal sheet is filed.

Pillsbury Winthrop, LLP

P.O. Box 10500 McLean, VA 22102 Tel: (703) 905-2000 Intellectual Propérty Group Dale S. Laza By Atty:

Sig:

Reg. No. 28872

(703) 905-2500 Fax:

Query: Is appeal deadline now? If

so, file Notice of Appeals separately.

Tel:

(703) 905-2126

Atty/Sec: DSL/VVK

NOTE: File this cover sheet in duplicate with PTO receipt (PAT-103A) and attachments